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A NEW SAUROPOD DINOSAUR FROM THE JURASSIC OF COLORADO.

BY J. B. HATCHER.

The remains upon which this paper is based were discovered and collected by Mr. W. H. Utterback in the lower Jurassic, in the quarry long worked by the late Professor Marsh, and situated some eight miles north of Canyon City, Colorado.

Haplocanthus priscus, gen. et sp. nov.

The type (No. 572, Carnegie Museum Collection) of this genus and species consists of the two posterior cervicals, ten dorsals, five sacrals with the ilia, ischia and pubes and the nineteen anterior caudals, two chevrons, a nearly complete series of ribs, and a femur, all in an excellent state of preservation.

The present genus and species can be distinguished from the known genera and species of the *Dinosauria* by the following characters: *Neural spines of posterior cervicals and anterior dorsals absolutely simple instead of deeply bifurcated as in all other known genera of the Sauropoda.* Sacrum composed of five vertebrae firmly coössified by their centra and functioning as sacrals. Sacral ribs and diapophyses greatly expanded transversely so as to appear proportionally low and broad. Neural spines of sacrals very short, only moderately expanded transversely, the three anterior coössified forming a long bony plate. Pubes massive and united by an extended cartilaginous pubic symphysis which is interrupted

medially by an elongated foramen. Pubic foramen large and situated some distance from the supero-internal border of the bone. Neural arches in dorsal vertebrae extremely high as compared with depth of centra or height of neural spines. Cervicals strongly opisthocœlus, and dorsals only moderately so and becoming almost platycœlus in the posterior dorsal region. Transverse processes of dorsal vertebrae extending obliquely upward and outward from summits of neural arches. Caudal centra short and somewhat amphicœlous with neural spines simple, low, and much compressed. Transverse processes of caudals each consisting of a simple, slender process which in the anterior caudal springs from the side of the neural arch. Posteriorly the transverse processes rapidly decrease in size and assume a more inferior position, so that in the twelfth caudal they are reduced to a rounded knob of bone on the side of the centrum, and in the succeeding caudals they have disappeared altogether. The centra of the anterior caudals are subcircular in outline, but in the posterior caudals the vertical diameter much exceeds the transverse.

The femur is rather longer than one might expect, considering the size and proportions of the individual vertebrae, but does not differ materially from that bone in other genera of the *Sauropoda*.

Haplocanthus may be regarded as the most generalized member of the *Sauropoda* yet discovered in America. That it is a member of the *Sauropoda* is clearly shown by the structure of the pelvis and by the characters exhibited by the cervical, dorsal and caudal vertebrae. The comparatively simple structure of the individual vertebrae from the various regions of the spinal column form a striking contrast to that complicated system of laminae and buttresses found in the vertebrae of *Diplodocus*, *Brontosaurus*, *Morosaurus*, and other *Sauropods*, and indicates that *Haplocanthus* was a more primitive form than any of the latter genera. Its affinities are clearly with the *Morosauridæ* and in size it is comparable with the smaller forms of *Morosaurus*. Its principal skeletal features will be fully described and illustrated in a forthcoming Memoir of the Carnegie Museum.